



UNITED STATES PATENT AND TRADEMARK OFFICE

Den
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,462	06/25/2003	Thaddeus Schroeder	DP-306034	3284
22851	7590	11/14/2006	EXAMINER	
DELPHI TECHNOLOGIES, INC.			WHITTINGTON, KENNETH	
M/C 480-410-202				
PO BOX 5052			ART UNIT	PAPER NUMBER
TROY, MI 48007			2862	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/603,462	SCHROEDER ET AL.
	Examiner	Art Unit
	Kenneth J. Whittington	2862

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 17 October 2006.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-3,7-9,11,13-17,21-25,27,31,34-39,41 and 46-64 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 1-3,7-9,11,13-17,21-25,27,31,34-39,41 and 47-64 is/are allowed.

6) Claim(s) 46 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 25 May 2006 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
5) Notice of Informal Patent Application
6) Other: _____

DETAILED ACTION

The Amendment filed October 17, 2006 has been entered and considered. In view thereof the rejection of claim 46 under 35 USC 112, 1st paragraph has been withdrawn. However, the 35 USC 112, 2nd paragraph rejection remains and the status of the claims is as follows.

Allowable Subject Matter

Claims 1-3, 7-9, 11, 13-17, 21-25, 27, 31, 34-39, 41 and 47-64 are allowed.

The following is an examiner's statement of reasons for allowance: these claims are allowed for the same reasons outlined in the Office Action mailed July 19, 2006.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim 46 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: this claim has allowable subject

Art Unit: 2862

matter for the same reasons as contained in the Office Action mailed December 28, 2005 (the indication of allowable subject matter in claim 4).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 46 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding this claim, it is noted that the recitations are impossible, inconsistent and thus, unclear in some circumstances. This claim recites that the target can only have a width equal to or less than the spacing between adjacent sensors. It then recites the target comprising two teeth with a target spacing and further goes on to state the target spacing is equal to or less than half the distance between the first and last sensor, note particularly the "equal to" limitation. Because the target itself has a limited width, its two teeth therein and the target spacing are equal to this limited width and no more. However, this claim contemplates a linear array

Art Unit: 2862

that can have more than 3 sensors, i.e., 5. If the target spacing is equal to half the distance between the first and last sensor, the target spacing would start at the first sensor and extend to the third, covering the second sensor. This means the target spacing would be greater than the width between the first and second sensor, which cannot happen because the target width must be equal to or less than the width between the first and second sensor, rendering the claim internally inconsistent.

Accordingly, claim 46 fails to provide a definite scope.

It is noted that amending this claim to recite that "the target spacing is less than half the distance between a first galvanomagnetic sensing element and a last galvanomagnetic sensing element of the linear array" would overcome the rejection. This would require deleting the limitation that the target spacing is "equal to" half the distance between the first and last sensing element.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS

Art Unit: 2862

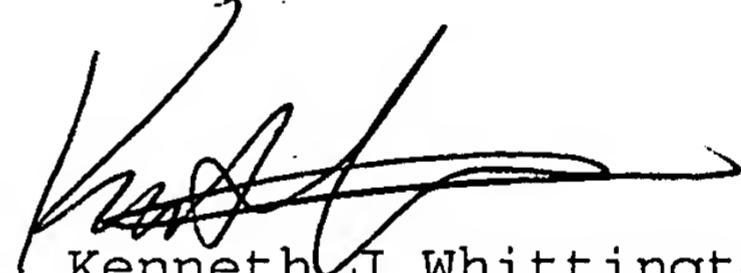
of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth J. Whittington whose telephone number is (571) 272-2264. The examiner can normally be reached on Monday-Friday, 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

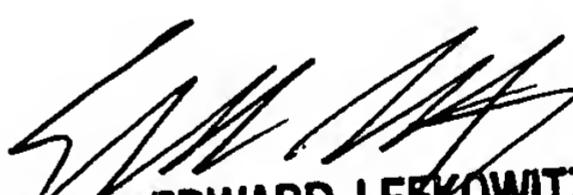
Art Unit: 2862

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kenneth J. Whittington
Examiner
Art Unit 2862

kjw



EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800